EXHIBIT 11

UNITED STATES PATENT AND TRADEMARK OFFICE

Examiner: Srilakshmi K. Kumar *Docket No.:* 2702 *Art Unit:* 2629

In re:

Applicant: Norbert FRUEHAUF

Serial No.: 10/689,352

Filed: October 20, 2003

AMENDMENT

February 19, 2008

Commissioner for Patents
P O Box 1450
Alexandria, VA 22313-1450

Sir:

This communication is responsive to the Office Action of November 28, 2007.

In the Office Action the Examiner rejected the claims under 35 U.S.C. 103(a) over the patent application publication to Inukai in view of the U.S. patent to Hunter.

Before the analysis of the prior art, it is believed to be advisable to explain the subject matter of the present invention as defined in claim 1 with the use of reference numerals utilized in the drawings.

Claim 1, the broadest claim on file, defines

a driving circuit for an image point 10 of an image screen which has an organic light-emitting diode, comprising

a capacitor C;

a feedback coupling;

a first thin film transistor T1 as a current-driving transistor for the diode;

a second transistor T2 which is connected by a current-conducting electrode with a gate of said first transistor and by a second current-conducting electrode with a data conductor D and by its gate electrode with a scanning signal conductor A;

a third thin film transistor T3 which during driving its gate through a driving conductor taps a diode driving current at an output of said first current-

driving transistor and supplies a current measuring- and voltage regulating circuit,

said current measuring- and voltage regulating circuit providing to the data conductor a voltage signal which is dependent on a current measuring result and a voltage comparison,

so that the diode LED during driving of said gate of said third transistor T3 due to its non-linear switching characteristic acts as a switch for a current deviation in said current measuring- and voltage regulating circuit 11.

In the Examiner's rejection of the claims, the Examiner indicated that a combination of the Inukai and Hunter references would lead to the applicant's invention as defined in claim 1. In his arguments the examiner confirms that: „While Inukai teaches the usage of a third thin film transistor, which taps the input of the first transistor, there fails to be any disclosure of **taping a driving current** being output from the first driving transistor.". The rejection is therefore essentially based on the examiners statement that: „Hunter in Fig. 5, teaches a third thin film transistor (45) which taps the output of the first driving transistor (40) .... (col. 5, lines 58 - col. 6, lines 5)".

In the above-discussed paragraph however no such information can be found (respectively exactly the opposite information is to be found) in the cited lines of the Hunter patent. The relevant part reads as follows (col. 5 line 61

to col. 5 line 65,): „Another TFT, a feedback TFT 45, is provided **whose current carrying terminals** are connected between the **gate** of the drive TFT **22** and a potential source Vd at a predetermined, low, level for example corresponding to the cathode potential. The **gate of the TFT 45** is connected via a capacitor 47 to the junction between the display element's anode and the TFT 40, and also

".

Clearly, the current carrying terminals (Drain and Source) of the feedback TFT 45 are connected to the gate (thus the **input)** of the driving TFT 22. Therefore, this part cannot be a motivation for the Examiner's statement that taping the output has been disclosed by Hunter. The second part describes that the gate of TFT 45 (which in a field effect type thin film transistor is not current carrying) is connected to the junction between the display element's anode and the switching (!!!) TFT 40. As the gate is not current carrying, it can only be used to tap a potential (or a voltage) but not a current. Additionally, Hunter mentions explicitly that his invention is based on taping a potential (respectively a voltage) (col. 2 lines 9-10). The fundamental difference between voltage and current is known to anyone, and therefore it is absolutely obvious that Hunter did not disclose current taping but merely the taping of a potential (or a potential difference). Additionally, this TFT is not taping a current **driving** TFT, thus a TFT which is determining the analog level of the current flow, but

only the output of TFT 40 that is acting as a switch (as it is explicitly mentioned in Hunter !!!).

This is also of relevance for the second part of the Examiner's statements, which read as follows: „Also, while Inukai teaches the usage of a current measuring and voltage regulating circuit, there fails to be any disclosure of the circuit providing an output voltage signal to the data conductor dependent **on a current measuring result and voltage comparison"** and later in the discussion of the Hunter patent: „ .. and where the output voltage signal is provided to the data conductor dependent on **a current measuring result** and voltage comparison...". As mentioned above, the Hunter patent is disclosing a potential (or a potential difference) measurement, but clearly not a current measurement.

Summarizing the above-presented analysis, it should be emphasized that the TFT 45 in Hunter is not sampling the output current of the driving TFT and thus Hunter is not using a current measurement at all. In contrast, Claim 1 clearly states that the third TFT „taps a diode driving current at an output of said first current-driving transistor and supplies a current measuring and voltage regulating circuit". Taping a current requires a current flow and thus a totally different architecture (i.e. a connection with the current carrying

terminals and not the gate of the tapping TFT). Therefore, the arguments presented by the Examiner in his rejection are not convincing.

It is believed to be clear that the new features of the present invention which are now defined in claim 1 are not disclosed in the references and also can not be derived from the combination of the references.

In order to arrive at the applicant's invention from the above analyzed references, the references have to be fundamentally modified, in particular by including into them the new features which were first proposed by the applicant. However, it is known that in order to arrive at a claimed invention, by modifying the references the cited art must itself contain a suggestion for such a modification.

This principle has been consistently upheld by the U.S. Court of Customs and Patent Appeals which, for example, held in its decision in re Randol and Redford (165 USPQ 586) that

> Prior patents are references only for what they clearly disclose or suggest, it is not a proper use of a patent as a reference to modify its structure to one which prior art references do not suggest.

It is therefore believed to be clear that claim 1, the broadest claim on file, should be considered as patentably distinguishing over the art and should be allowed.

Claim 2 which depends on claim 1 defines that the second and the third transistors have gate electrodes which are both connected with the scanning signal conductor.

The Examiner's statement for rejecting Claim 2 is not convincing as this Claim deals with a second possible implementation of the invention which is fundamentally different from the circuit in Inukai (as discussed above). The features of claim 2 are not disclosed in the references. It is therefore believed to be clear that claim 2 should also be considered as patentably distinguishing over the art, not only because it depends on claim 1, but also because it contains the patentable subject matter per se.

In rejecting Claim 3, the examiner claims that „Inukai teaches that all of the above mentioned elements of the driving circuit are located at the same side of the light emitting diode, ... (see Paragraph 88).", while actually, in Paragraph 88 Inukai states: **„If possible,** the above-described components may be formed on the same substrate as the pixel portion". This is clearly expressing a wishful thinking and not teaching that should be clearly disclosed in the

reference. This does not change the fact that the pixel matrix and the measuring circuit of Inukai (as well as those of the circuit of Bu which was mentioned in earlier rejections) are located on (respectively connected to) the anode and the cathode side of the OLED device. Therefore, via contacts from the bottom side to the top side of the OLED device will always be required if the entire driver circuitry is to be placed on a single substrate (typically below the OLED). In the case of Inukai where all the measuring contacts for each column are connected together, this might be realized at the edge of the display. Still, this would require a costly structuring of the top electrode and realizing this via connection across the edge of the OLED stack.

Claim 3 explicitly mentions that "all .... elements of the driving **circuit"** (thus clearly stating that the discussion is not just about the physical layers, but about the circuit elements !!!) of the present invention are placed on the same side of the light emitting diode. This is emphasized by the last lines of Claim 3 which explicitly state "that no contacts must be guided through a semiconducting material of the diode", as eliminating such vias necessitates placing all elements on the same side in the circuit diagram (respectively, as with arbitrary numbers of vias through the OLED device, any circuit (e.g. the one of Inukai) can be physically placed on one side of the device). For a person of ordinary skill in the art, which in this case of a driving circuit would be a circuit

designer, the above mentioned interrelations between a circuit structure and a physical layering are trivial.

It is believed to be clear that claim 3 should also be considered as patentably distinguishing over the art and should also be allowed.

Reconsideration and allowance of the present application with all the claims currently on file is most respectfully requested.

Should the Examiner require or consider it advisable that the specification, claims and/or drawings be further amended or corrected in formal respects in order to place this case in condition for final allowance, then it is respectfully requested that such amendments or corrections be carried out by Examiner's Amendment, and the case be passed to issue. Alternatively, should the Examiner feel that a personal discussion might be helpful in advancing this case to allowance; he is invited to telephone the undersigned (at 631-549-4700).

Respectfully submitted,

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